## Commercially viable process for high purity of fatty alcohol C24 to C36 and its cosmetic application for skin hair and nails

## **Abstract**

The present invention discloses an economically viable process for producing large quantity of higher fatty alcohol of chain length C  $_{24}$ -C  $_{36}$  from natural waxes. The said alkanols have enriched percentage of 70 – 95% of C  $_{28}$  fatty alcohol (Octacosanol) along with less percentage of lower chain length fatty alcohols. The invention discloses the use of supercritical carbon dioxide extraction along with immobilized enzyme for saponification. The present invention also discloses the cosmetic applications of alkyalkanols collectively referred to as policosanol, for control of sebum secretion and as anti-acne component effectively used in cosmetic formulations.